

ABSTRACT

A system and method for uniquely identifying peers and other resources in a peer-to-peer networking environment. In one embodiment, every peer in the peer-to-peer network may have a unique peer identifier. Other peer-to-peer network resources may also have unique identifiers, including peer groups, services, applications, pipes, endpoints, content and resource advertisements. Identifiers may serve to canonically refer to resources. Identifiers may be embedded in advertisements for resources. In one embodiment, a peer identifier may identify a peer group in which the peer is a member peer. In one embodiment, a peer may have a different peer identifier for each group in which it is a member peer. In one embodiment, an identifier may be bound to a network address of the resource. If the resource changes network addresses, the identifier may be bound to the new network address. Thus, identifiers provide dynamic addressing for resources in the peer-to-peer environment.